

TOWNSEND and TOWNSEND and CREW LLP

By: Jonathan L. Parker

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Paul Hinton, et al.

Application No.: 10/687,118

Filed: October 15, 2003

For: ALTERATION OF FCRN  
BINDING AFFINITIES OF SERUM  
HALF-LIVES OF ANTIBODIES BY  
MUTAGENESIS

Customer No. 20350

Confirmation No.: 7362

Examiner: Chun Crowder

Art Unit: 1644

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER  
37 CFR §1.97 and §1.98

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The documents cited on attached forms PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of documents AU, AV and AZ-BF in compliance with the requirements of 37 C.F.R. §1.98(a)(2) are enclosed. A copy of document AW was previously provided with copies of other documents and form PTO-1449 via a Communication mailed March 10, 2005. Unfortunately, that earlier filed form PTO-1449 contained an error in the indicated publication date for document AW. The inclusion of the correct information in the current IDS is provided in the interest of compliance with 37 C.F.R. §1.98(b)(4).

The earlier filed form PTO-1449 also included a number of documents among AA to AN which were cited without compliance with 37 C.F.R. §1.98(b)(4). Therefore, Applicants

have included them in the instant form PTO/SB/08A to provide compliance with 37 C.F.R. §1.98(b)(4).

It is respectfully requested that the cited documents be expressly considered during the prosecution of this application, and the documents be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and documents cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/687,118
Filing Date	October 16, 2003
First Named Inventor	Hinton, Paul R.
Art Unit	1644
Examiner Name	Chun Crowder
Attorney Docket Number	011823-012610US

Sheet **1** of **2****U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2,3</sup> (if known)			
	AA	US-5,994,514		09/14/1991	Jardieu, et al.	
	AB	US-6,165,745		04/24/1992	Ward, et al.	
	AC	US-6,528,624		03/04/2003	Idusogie, et al.	
	AD	US-6,530,101		06/25/1996	Queen, et al.	
	AE	US-6,834,597		11/10/1996	Tao, et al.	
	AF	US-7,083,784 B2		06/01/2006	DelfAcqua, et al.	
	AG	US-6,797,493		09/28/2004	Sun, et al.	
	AH	US-20030044856A1		05/07/1992	Jardieu, et al.	
	AI	US-20030003085A1		04/05/1995	Strom	
	AJ	US-20020098193A1		03/03/1997	Ward	
	AK	US-20010033842A1		08/14/1991	Jardieu, et al.	
	AL	US-2005/0032114		02/10/2005	Hinton, et al.	
	AM	US-2005/0276799		12/15/2005	Hinton, et al.	
	AN	US-2006/0195840 A1		09/07/2006	DelfAcqua, et al.	
	AO					
	AP					
	AQ					
	AR					
	AS					
	AT					

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†*
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	AU	PCT	WO04/092219	A2	10/28/2004	Protein Design Labs, Inc.		<input type="checkbox"/>
	AV	PCT	WO00/06381	A1	11/16/00	Zymogenetics, Inc.		<input type="checkbox"/>
	AW*	PCT	WO02/60919	A2	08/06/2002	MedImmune, Inc.		<input type="checkbox"/>
	AX							<input type="checkbox"/>
	AY							<input type="checkbox"/>

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 909. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet **2** of **2****Complete if Known**

Application Number	10/687,118
Filing Date	October 15, 2003
First Named Inventor	Hinton, Paul R.
Art Unit	1644
Examiner Name	Chun Crowder
Attorney Docket Number	011823-012610US

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AZ	KRUEGER, James G., et al. "Successful in vivo blockade of CD25 (high affinity interleukin 2 receptor) on T cells by administration of humanized anti-Tac antibody to patients with psoriasis", <i>J. Am. Acad. Dermatol.</i> (2000) 43(3):448-458	<input type="checkbox"/>
	BA	ELLISON, Jay, et al. "Linkage and sequence homology of two human immunoglobulin $\gamma$ heavy chain constant region genes", <i>Proc. Natl. Acad. Sci USA</i> (1982) 79:1984-1988	<input type="checkbox"/>
	BB	ATTWOOD, Teresa K. "The Babel of Bioinformatics", <i>Science</i> (2000) 290:1-5 (html format)	<input type="checkbox"/>
	BC	SKOLNICK, Jeffrey, et al. <i>Trends in Biotechnology</i> (2000) 18(1):34-39	<input type="checkbox"/>
	BD	DATTA-MANNAN, A., et al. "Humanized IgG: Variants With Differential Binding Properties to the Neonatal Fc Receptor: Relationship to Pharmacokinetics in Mice and Primates", <i>Drug Metabolism and Disposition</i> , [published on Oct. 18, 2006 as doi:10.1124/dmd.106.011734 - DMD#11734, pages 1-47]	<input type="checkbox"/>
	BE	DATTA-MANNAN, A, et al. "Monoclonal Antibody Clearance: Impact of modulating the interaction of IgG with FcRn", <i>Journal of Biological Chemistry</i> [in press - published on November 29, 2006 as Ms. M607161200, pages 1-24]	<input type="checkbox"/>
	BF	DALL'ACQUA, William F., et al. "Properties of Human IgG1s Engineered for Enhanced Binding to the Neonatal Fc Receptor (FcRn)", <i>Journal of Biological Chemistry</i> (2006) 281(33):23514-23524	<input type="checkbox"/>
	BG		<input type="checkbox"/>
	BH		<input type="checkbox"/>
	Bi		<input type="checkbox"/>

Examiner Signature	Date Considered
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\*EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached